### OWNER'S GUIDE

# HR230 FRESH AIR VENTILATION SYSTEM





69-0854

### WELCOME...

...to the world of efficient ventilation. Engineered and built for long, trouble-free operation, this Honeywell HR230 Fresh Air Ventilation System provides proper levels of ventilation with energy savings by transferring heat between the exhaust and fresh air streams. Your home will now be better protected from indoor pollutants such as formaldehyde, tobacco by-products, radon, moisture, combustion by-products and carbon monoxide. With the Honeywell Fresh Air Ventilation System, you can expect to enjoy the benefits of a properly ventilated energy efficient home for years to come.

#### Features and benefits:

- Easy-to-clean counterflow core assures years of trouble-free operation.
- Quiet operation reduces the typical noise levels added by ventilation products.
- · Efficient, low energy consumption saves on utility bills.
- Recovers up to 84% of the difference between indoor and outdoor temperatures.

#### CONTENTS

	PAGE
THE BENEFITS OF THE PERFECT CLIMATE® SYSTEM AND THE FRESH AIR VENTILATION SYSTEM	2
CONSIDER THE COMPLETE PACKAGE FOR PERFECT CLIMATE® FOR YOUR HOME	3
PERFECT CLIMATE®	4
CONTROLS FOR YOUR FRESH AIR VENTILATION SYSTEM	5
OPERATING YOUR FRESH AIR VENTILATION SYSTEM	6
GETTING THE MOST FROM YOUR FRESH AIR VENTILATION SYSTEM	8
MAINTENANCE INSTRUCTIONS FOR THE FRESH AIR VENTILATION SYSTEM	9
I IMITED WARRANTY Inside Back	Cover

#### **Attention Homeowner:**

The HR230 Fresh Air Ventilation System must be maintained on a regular basis for maximum efficiency. For complete instructions on maintaining your Fresh Air Ventilation System, refer to the Maintenance Instructions for the Fresh Air Ventilation System section on page 9.

## THE BENEFITS OF THE PERFECT CLIMATE® SYSTEM AND THE FRESH AIR VENTILATION SYSTEM

We take it for granted that our homes protect us from the elements. But, because of tighter, better quality home constructions, our indoor environments may be exposing us to unacceptable levels of the very things we are trying to escape—excessive heat, dryness, humidity, toxic gases, dust and contaminants—sealed neatly in by the weatherproofing.

So, what's the weather forecast for indoors?

Today's indoor forecast is stormy weather for many homeowners. But rapid clearing and fresh breezes are just around the corner!

#### Feeling Right at Home

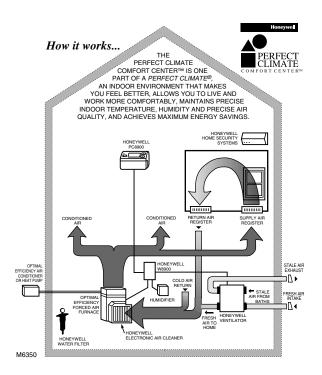
Unlike what the outdoor brings us, you can have control of indoor conditions. Temperature, humidity levels and air quality all can affect physical health, mental attitude, general comfort and energy savings. With today's technological advances, you can achieve a "perfect climate" indoors.

After all, people look to their homes as a place to escape the stresses of work, a busy lifestyle and an increasingly polluted outdoor environment. Creating a perfect indoor climate is becoming critical to feeling right at home.

The Honeywell Fresh Air Ventilation System removes stale, unhealthy inside air and replaces it with a stream of fresh air.

Have you considered the complete package of Perfect Climate controls for your home?

# CONSIDER THE COMPLETE PACKAGE FOR PERFECT CLIMATE® FOR YOUR HOME



- 1. Honeywell PC8900 Perfect Climate Comfort Center™
- 2. Honeywell F50, the air cleaner of choice
- 3. Honevwell Dehumidistat
- 4. Honeywell Fresh Air Ventilation System
- 5. F76 Water Filter
- 6. Honeywell Home Security System

#### PERFECT CLIMATE®

#### **Describing Perfection**

The most convenient, most energy efficient, cleanest, healthiest and most comfortable indoor environment possible today! Perfect climate is achieved when the components of a home's climate system work together:

- · optimal efficiency heating and cooling equipment.
- precise, programmable temperature control.
- high efficiency air cleaning/filtering.
- proper humidity control.
- proper ventilation and air distribution.
- · whole house water filter.
- security system.
- lighting control.
- multi-zone temperature control.

#### Products for a Perfect Climate® System

Heating and cooling system: This is the workhorse of your indoor climate system. Good advice is to have your local heating/cooling contractor tune up your system annually for comfort, safety and economy reasons. If your heating plant is old, think about replacing it with a modern and improved unit. Advances in product technology have very impressively increased the efficiency of equipment. Sometimes the improved performance will pay back much of the cost in a few short years.

For additional information about the Honeywell Perfect Climate® System, please visit our website at www.honeywell.com/yourhome, or call the 24-hour automated information line at 1-800-468-1502.

#### CONTROLS FOR YOUR FRESH AIR VENTILATION SYSTEM

Your Fresh Air Ventilation System controls are located on the ventilator cabinet. See Fig. 1. There are two switches, and an indicator light (defrost models only). In addition, control of your ventilator may be enhanced by the use of one or more Honeywell products—Perfect Climate Comfort Centers<sup>TM</sup>, dehumidistats, timers or wall switches.

#### 1. POWER SWITCH

This switch is located on the ventilator control panel. It is used to control power to the entire ventilation system. When this switch is in the Off position, the ventilation system is completely shutdown.

#### 2. Lo-Standby-Hi SWITCH

This switch is also located on the ventilator control panel. It is used to control the speed of the ventilation system. When the switch is in the Lo position, the ventilator runs at reduced speed (135 cubic feet per minute [cfm]). When the switch is in the Hi position, the ventilator runs at full speed (230 cfm). When the switch is in the Standby position, the ventilator is powered, but it is not operating. A signal from a dehumidistat, a timer, or a wall switch will cause the ventilator to run at full speed. When the signal is removed, the ventilator will shut off and return to the Standby mode.

INDICATOR LIGHT (Defrost Models Only)
 The indicator light is located on the ventilator control panel on ventilators that have built-in defrost capability. The indicator light is on when the ventilation system is in defrost.

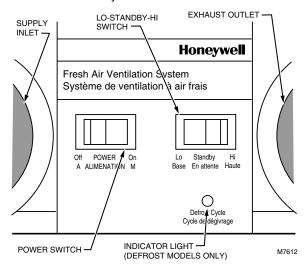


Fig. 1. Fresh Air Ventilation System controls on ventilator cabinet.

#### OPERATING YOUR FRESH AIR VENTILATION SYSTEM

#### Step 1

Move the power switch to the On position. With this switch in the Off position, all power to the system is removed and no system controls will have any effect.

#### Step 2

Move the Lo-Standby-Hi switch to the Lo position. This setting will provide a low ventilation rate suitable for continuous operation. When you do not want continuous ventilation, move the switch to the Standby position. Activating a Perfect Climate Comfort Center, a timer, a wall switch or the sensing of high humidity by the dehumidistat will switch the ventilator into the high speed from either the Lo or Standby position. Move the switch to the Hi position when you want maximum ventilation.

#### Step 3

The Perfect Climate Comfort Center may be used to control your ventilation rate. This can be done automatically by using the programmed times or manually by pressing the Ventilate button on the keypad. See the Perfect Climate Comfort Center™ User's Guide (form 69-0891) for complete instructions.

#### Step 4

When one or more dehumidistats are part of the control scheme, set the dehumidistat at the desired humidity level. Generally, the dehumidistat(s) should be located in areas, such as a bathroom, that generate excess moisture. When a shower is used, the local humidity level will go above the dehumidistat setpoint and the ventilation system will switch to the high speed (maximum ventilation). The ventilation system will return to the previous setting when the humidity drops below the setpoint.

NOTE: When there is more moisture in the outside air than the inside air (summer time), turn off the dehumidistat(s). Moisture laden outdoor air brought inside will not dry the house.

If your heating system has a powered humidifier, make sure the dehumidistat is set at least ten percent relative humidity above your humidistat. It may be necessary to lower the humidistat setting to avoid condensation in the winter

#### Step 5

Your Fresh Air Ventilation System may utilize one or more timers. When a high ventilation rate is desired, turn the timer to the desired number on minutes. The Ventilator will switch from the Lo or Standby setting to the high speed. The ventilator will return to the previous setting when the time runs out.

#### Step 6

Your Fresh Air Ventilation System may utilize one or more wall switches to provide manual control of the system. If a high ventilation rate is desired, move a switch to the maximum position. The ventilator will run at high speed until the switch is returned to the normal position.

NOTE: The ventilator will run at high speed if any device in the system (Perfect Climate Comfort Center, dehumidistat, timer or wall switch) is activated.

## GETTING THE MOST FROM YOUR FRESH AIR VENTILATION SYSTEM

#### **Moisture Control**

Continual operation of the ventilation system is recommended for optimum reduction of indoor air pollution and control of humidity. Increased moisture removal will always occur at maximum ventilation rates. Use the Hi switch position when first occupying a newly built home to remove excess moisture from new wood, plaster, cement and other moisture absorbing construction materials. If your system is wired to a dehumidistat, it will switch the ventilator to the high speed setting whenever the humidity level goes above the setpoint.

NOTE: When the amount of moisture in the outside air is greater than the amount in the inside air, running the ventilation system will not dry the home. This will occur most often in the summer months.

#### **Remote Override Switch Functions**

Your Fresh Air Ventilation System may incorporate one or more remotely mounted Perfect Climate Comfort Centers™, dehumidistats, timers or wall switches. When any of these devices are activated, the ventilator will run at the high speed. The ventilator will return to the previous setting when all the remote devices are deactivated. The remote override function, in combination with the Standby setting, is especially useful for intermittent bathroom exhaust where continuous ventilation is not required. Continuous operation is recommended except when the home is unoccupied, or when proper ventilation is provided by other means such as open doors and windows.

#### Defrost

Ventilators designed for use in cold climates are equipped with an automatic defrost system. The ventilator automatically detects restricted airflow in the heat transfer core when ice starts to form and a defrost cycle is initiated. The ventilator is closed off from the duct system, an auxiliary heater is turned on and the air inside the ventilator is recirculated continually to melt the ice that has formed. When the airflow returns to normal, the sequence is reversed and ventilation returns to normal. When the ventilator is in defrost, the LED indicator light on the control panel is illuminated. Defrost time is held to a minimum by Honeywell's exclusive automatic defrost initiation circuit.

8

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## MAINTENANCE INSTRUCTIONS FOR THE FRESH AIR VENTILATION SYSTEM



#### Electric shock hazard.

Can cause personal injury or equipment damage.

Before doing maintenance, disconnect power to the ventilator by unplugging the power cord.

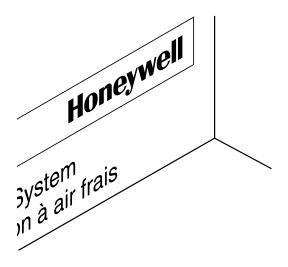
NOTE: Your Fresh Air Ventilation System must be maintained on a regular basis for the best efficiency. Honeywell recommends the Fresh Air Ventilation System be cleaned and checked at least twice a year, preferably at the start of each heating and cooling season.

#### Check and/or Clean as Follows:

#### HEAT TRANSFER CORE AND FILTERS

The room air filter, fresh air filter and the heat transfer core are removed from the ventilator as a unit.

1. Remove the drain hose(s) from the bottom of the check valve. Turn the check valve and fitting out of the bottom of the ventilator. Use a wrench or pliers to loosen the fitting, if necessary. See Fig. 2.



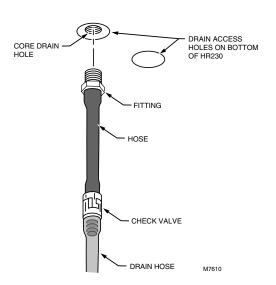


Fig. 2. Remove drain hose.

2. Remove the core access door (located on the back of the ventilator cabinet) by sliding the two catches to the left and pull the door open and off. See Fig. 3.

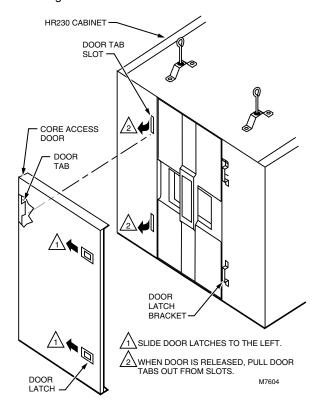


Fig. 3. Remove core access door.

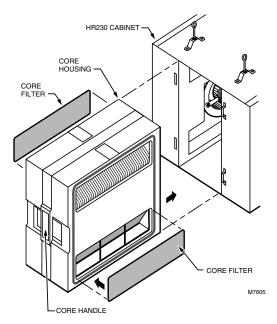


Fig. 4. Remove core from ventilator.

3. Using the handle, pull the core straight out approximately halfway. While supporting the core at the bottom with one hand, pull the core completely out. See Fig. 4.



Do not lift the core by the top or bottom flange to prevent core damage. Carry the core by the handle. See Fig. 4.

- 4. The filters can be removed from the core housing by grasping the filter material between the thumb and index finger and lifting out.
- 5. Spray off the filters with a garden hose.
- 6. Wash the core by spraying it with Fantastik® or a similar cleaner.
- Let the core sit for a few minutes, then spray it off with a low pressure garden hose. Shake the excess water out of the core before reinserting it into the ventilator.
- 8. Check the interior of the ventilator for any debris that may have fallen off the filters and vacuum out as necessary.
- 9. Reassemble the ventilator by reversing the above procedure. Make sure the drain connections are down when inserting the core.

#### WEATHER CAPS

Check to make sure that the outside fresh air inlet and stale air exhaust weather caps have not become clogged with debris such as grass, leaves or snow. Clean as necessary.

#### LIMITED WARRANTY

Honeywell warrants this product to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date or purchase by the consumer. If, at any time during the warranty period, the product is defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option) within a reasonable period of time.

If the product is defective, please contact:

- a) the dealer from whom you purchased it, or
- b) the local Honeywell Home and Building Control Sales Office who will assist you in locating a qualified service representative,

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESSED OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, WORKMANSHIP, OR FITNESS FOR A PARTICULAR PURPOSE.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this warranty, please write to Home and Building Control Customer Relations, Honeywell, 1985 Douglas Drive North, Minneapolis, Minnesota, 55422. In Canada, Honeywell Limited/ Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9.

Contact Your Local Installer

Home and Building Control Honeywell Inc. 1985 Douglas Drive North Golden Valley, MN 55422

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Honeywell

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